Note

Sassafras albidum: A New Host Plant Record for Larval Melanolophia signataria (Lepidoptera: Geometridae) from Central Virginia

Larvae of Melanolophia signataria (Walker) have been reported to feed on a wide variety of woody plants in eastern North America. Recorded host plants include: Abies spp. (firs), Abies balsamea (L.) Miller (balsam fir), Acer spp. (maples) Alnus spp. (alders), Betula spp. (birches), Betula alleghaniensis Britton (yellow birch), Larix laricina (DuRoi) K. Koch (tamarack), Picea spp. (spruces), Picea glauca (Moench) Voss (white spruce), Populus spp. (poplars), Quercus spp. (oaks) and Ulmus americana L. (American elm) (Mc-Guffin. 1944. Canadian Entomologist 76: 124; Forbes 1948. Lepidoptera of New York and neighboring states. Part II. Memoir 274. Cornell University Agricultural Experiment Station; Tietz 1952. The Lepidoptera of Pennsylvania. Pennsylvania Agricultural Experiment Station, Pennsylvania State College, State College, PA; Covell. 1984. A field guide to the moths of eastern North America. Houghton Mifflin Co. Boston, MA). Forbes (op cit) noted past confusion between larval host plants of M. signataria and the closely related M. canadaria (Guenee) and questioned the validity of some host plant records for both species. In this note I report a new, verified host plant record for larval M. signataria from central Virginia.

During early June 1991, I collected larval *M. signataria* from leaves of sassafras, *Sassafras albidum* (Nutt.) Nees, growing in a forest edge near Lovingston, Nelson County, Virginia, as part of a survey of the insect herbivore complex of *S. albidum*. Field-collected *M. signataria* larvae were confined to separate recloseable plastic sandwich bags containing fresh leaves of *S. albidum*

to determine: 1) if larvae actually feed and develop on *S. albidum:* or 2) if captures were incidental on a non-food host. Captive larvae of *M. signataria* fed readily on leaves of *S. albidum*, pupated, and emerged as adults within one month of collection, indicating that *S. albidum* is an acceptable host plant for larval feeding and development. Cursory field surveys conducted in the same area during 1992 again noted the occurrence of larvae of *M. signataria* feeding on leaves of *S. albidum*, confirming the trophic association between insect and plant at this site.

Melanolophia signataria was by far the least numerous member of the larval lepidopteran fauna on S. albidum at the Virginia site (only three larvae could be collected for rearing in 1991), which was dominated by Caloptilia sassafrasella (Chambers) (Lepidoptera: Gracillariidae), Epimecis hortaria (F.) (Lepidoptera: Geometridae) and Papilio troilus L. (Lepidoptera: Papilionidae). It is uncertain if the relative rarity of larval M. signataria on S. albidum at the Virginia study site is due to the infrequence of the species in the area in general, to the presence of more desirable primary host plants on which adults preferentially oviposit, or because larvae feed on such a broad array of host plants that they are widely dispersed across numerous hosts.

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one anonymous referee made constructive comments on the manuscript. Voucher specimens are deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. Charles E. Williams, Department of Biology, Clarion University of Pennsylvania, Clarion, Pennsylvania 16214-1232.